

What is claimed is:

- 1           1.       A method, comprising:  
2                   receiving data relating to a database system;  
3                   receiving, from the device, information associated with at least one  
4       characteristic of the data;  
5                   partitioning the data for storage in a database system having plural data  
6       storage units based on the characteristic associated with the data; and  
7                   storing the partitioned data in one or more storage units of the database  
8       system.
- 1           2.       The method of claim 1, wherein receiving the information comprises  
2       receiving the information from a client system, the device comprising the client system.
- 1           3.       The method of claim 1, wherein receiving the information comprises  
2       receiving at least one of an average value of the data, a uniform distribution of the data, a  
3       minimum value of the data, and a maximum value of the data.
- 1           4.       The method of claim 3, wherein partitioning the data comprises defining  
2       straight-line segments based on at least one of the average value of the data, the uniform  
3       distribution of the data, the minimum value of the data, and the maximum value of the  
4       data.
- 1           5.       The method of claim 4, wherein partitioning the data further comprises  
2       defining breakpoints to provide the straight-line segments.
- 1           6.       The method of claim 1, wherein partitioning the data for storage in the  
2       database system comprises dividing the data into segments containing related data.

1           7.       The method of claim 1, wherein partitioning the data comprises organizing  
2 the data into related portions.

1           8.       The method of claim 7, wherein partitioning the data further comprises  
2 executing an algorithm to organize the data.

1           9.       The method of claim 1, wherein storing the partitioned data in the database  
2 system comprises storing the partitioned data in a relational database system.

1           10.      The method of claim 1, further comprising storing the partitioned data  
2 under the supervision of a limited number of data servers relating to the database system.

1           11.      An apparatus, comprising:  
2                   a database;  
3                   a network interface;  
4                   a database controller coupled to the database, wherein the database  
5 controller is adapted to receive partitioning information and perform a partitioning task  
6 on data received through the network interface based on the partitioning information,  
7                   the database controller adapted to further store the data that is partitioned  
8 by the partitioning task, the partitioning task to identify one or more portions of the  
9 database in which each segment of the partitioned data is stored.

1           12.      The system of claim 11, wherein the database is a parallel database system.

1           13.      The system of claim 11, wherein the database is a relational database.

1           14.     The system of claim 11, wherein the database controller comprises:  
2                     a query coordinator coupled to the network interface, the query coordinator  
3     to receive query requests from the network interface;  
4                     a partitioner to partition data and perform at least one of storing and  
5     locating partitioned data in the database in response to the query requests; and  
6                     a partitioner data storage coupled to the partitioner, the partitioner data  
7     storage to store information associated with at least one characteristic of the data to  
8     enable the partitioner to partition data.

1           15.     The system of claim 14, wherein the partitioner is capable of executing an  
2     algorithm, based on the stored information, for partitioning the data.

1           16.     The system of claim 15, further comprising a plurality of data servers to  
2     store and access partitioned data in the database.

1           17.     The system of claim 11, further comprising a client system, wherein the  
2     client system sends data to the database through the network interface.

1           18.     The system of claim 17, wherein the client system sends at least one  
2     characteristic of the data to be used by the database controller to partition the data.

1           19.     An article comprising one or more storage media containing instructions  
2     that when executed cause a device to:  
3                     receive information associated with at least one characteristic of data to be  
4     stored into a database from a remote device;  
5                     partition the data for storage in a database system based on the  
6     characteristic of the data; and  
7                     store the partitioned data in the database system.

1           20.     The article of claim 19, wherein the instructions when executed cause the  
2     device to execute an algorithm to partition the data.

1           21.     The article of claim 19, wherein the instructions when executed cause the  
2     device to divide the data into segments containing related data.